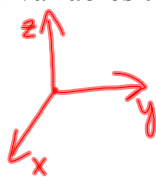


Graphing Planes in Three-Space

$$Ax + By + Cz = D$$

2 variables the graph is a line

3 variables the graph is a plane



Example

$$2x + 2y + z = 8$$

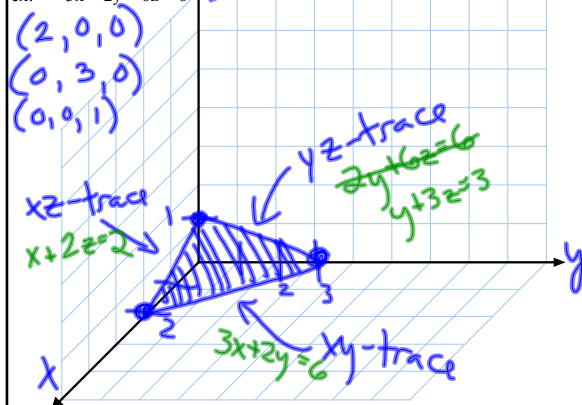
$$\begin{array}{l} (1, 1, 4) \\ (1, 3, 0) \\ (2, 1, 2) \\ (0, 4, 0) \end{array} \quad \begin{array}{l} (0, 0, 8) \\ (4, 0, 0) \\ (0, 3, 2) \\ (0, 2, 4) \end{array} \quad \begin{array}{l} (0, \frac{1}{2}, 7) \\ (2, 2, 0) \end{array}$$

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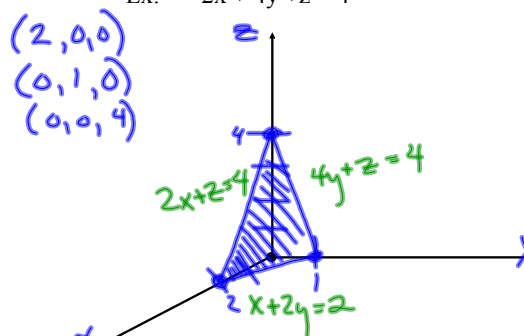
Graph using intercepts.

ex: $3x + 2y + 6z = 6$

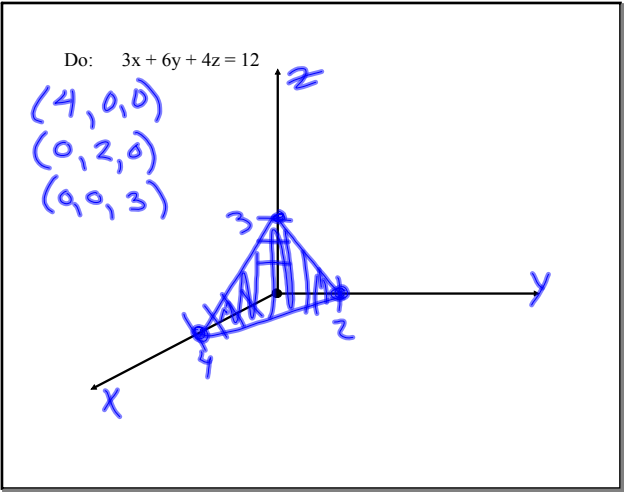


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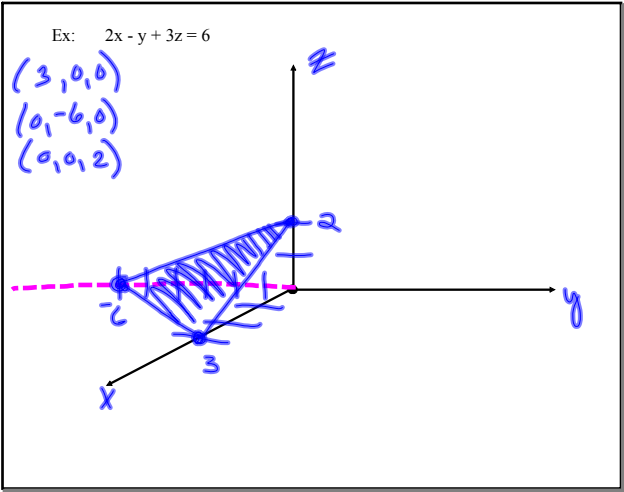
Ex: $2x + 4y + z = 4$



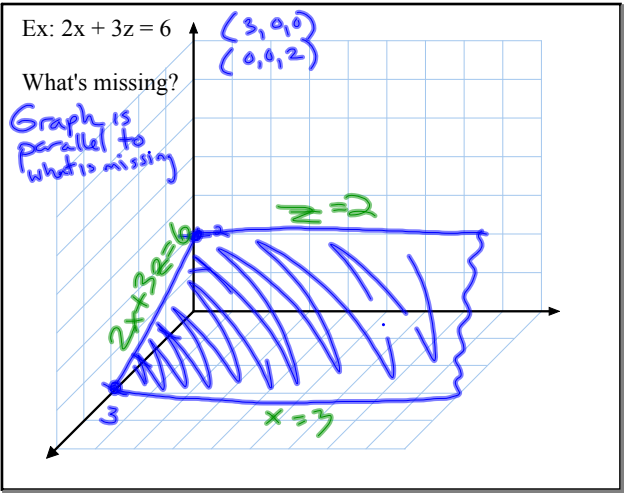
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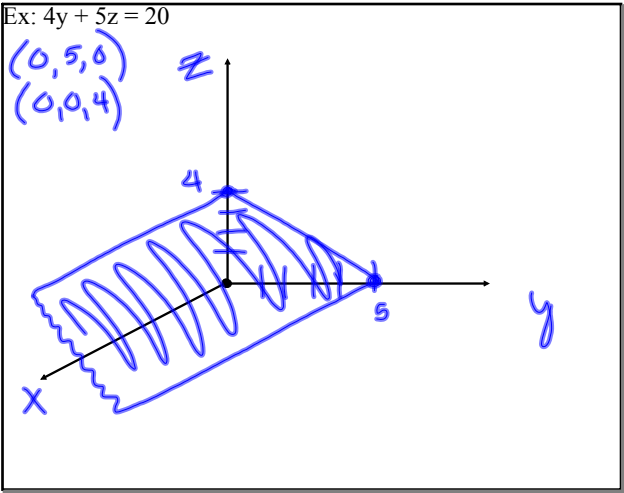
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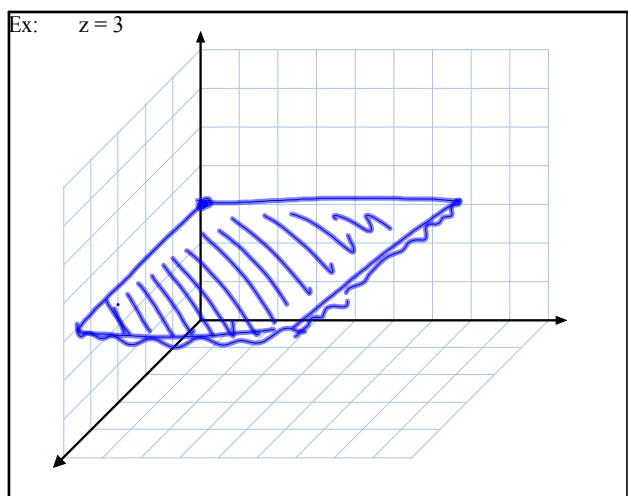
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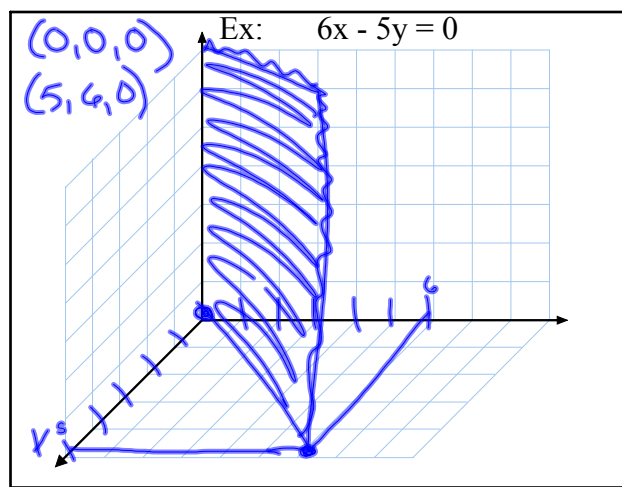
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Oct 19-12:18 PM



Oct 19-12:18 PM



Oct 19-12:19 PM